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AUTHOR Wolfe, Raymond N.; Grosch, James W.
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ABSTRACT

Social learning theory implies that there should be a significant positive relationship between academic performance and self-concept and outcomes of recent meta-analyses support this prediction. While path-analytic studies of high school samples in the 1960s and 1970s demonstrated that ability and achievement each made a small positive contribution to self-esteem, more recent data from 1986 showed that ability and achievement yielded small negative relationships with self-esteem. This issue was addressed by examining the high school and college records (cumulative grade point average, Scholastic Aptitude Test scores, average high school grade) of 162 college students in 1988 and 193 college students in 1989. Subjects completed personality scales; measures of optimism, self-efficacy, objectivism, self-monitoring, and need for cognition; measures of negative affect (1988 sample); and measures of constructive thinking and positive affect (1989 sample). The findings revealed that cumulative grade point average in college was unrelated to the personality measures in both samples. In the 1988 sample, a negative affect factor and the variables defining it were associated with having earned good grades in high school. In the 1989 sample, a constructive thinking factor and the variables defining it correlated negatively with having earned good grades in high school. (NB)

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Title: Negative relationship between achievement in high school and self-concept in college.

Authors: Raymond N. Wolfe, SUNY at Geneseo and James W. Grosch, Colgate University

Problem: Social learning theory implies that there should be a significant positive relationship between academic performance and self-concept. Outcomes of recent meta-analyses support this prediction: In 128 studies analyzed by Hansford and Hattie (1982), various measures of achievement correlate between .12 and .34 with self-concept measures; whereas in 18 studies published during the 1980s, self-efficacy accounts for about 14% of the variance in academic performance and about 12% of the variance in academic persistence (Multon, Brown, & Lent, 1991, p. 34).

Path-analytic studies of high school samples in the 1960s and 1970s demonstrate that, along with other variables, ability and achievement each make a small positive contribution to self-esteem (e.g., Bachman & O'Malley, 1977; Calsyn & Kenney, 1977). A different pattern, however, emerges in a more recent report by Bachman and O'Malley (1986): Their data show that ability and achievement yield small negative relationships with self-esteem. These negative rs, though not significantly different from zero, are anomalous -- they fly in the face of social learning theory

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and are contrary to the evidence summarized by Hansford and Hattie (1982) and Multon et al. (1991). Marsh, who reanalyzed Bachman and O'Malley's data, has been led, partly perhaps by the results of that reanalysis, "to question the usefulness of general self-concept as an academic outcome" (1991, p. 466).

We disagree with Marsh's conclusion because it is contrary to social learning theory and because it tends to sweep the observed negative relationships under the rug. An alternative, more historical interpretation is worth considering: Perhaps something different has begun to happen in terms of how people's self-concepts are formed. For example, academic achievement may have been highly valued in the 1960s and 1970s, but comparatively disvalued in the 1980s -- as foreseen by Postman (1979).

To bring data to bear upon this problem, we examined the high school and college records of two groups of college students.

Method: Data were obtained from separate samples of SUNY Geneseo students, 162 (137 women, 25 men) in Fall 1988 and 193 (168 women, 25 men) in Fall 1989. Personality scales were group-administered in each sample. Measures of optimism, self-efficacy, objectivism, self-monitoring, and need for cognition were used with both samples. Several measures of negative affect were administered in 1988; measures of constructive thinking and positive affect replaced these in 1989 (for full descriptions of inventories and procedure with the 1988 and 1989 samples, see Wolfe & Grosch, 1990a and Wolfe & Grosch, 1990b, respectively).

Each subject's cumulative GPA, college major, SAT scores, and average high school grade were obtained as available from College records in July 1991. By that time, most of the 1988 sample had graduated or left the College, whereas most of the 1989 sample had completed at least the first two years of coursework.

Results: Preliminary analyses of grading patterns at the College revealed a tendency toward grade inflation in Education courses, and a correction for this was devised. Whether corrected or not, cumulative GPA in college was unrelated to the personality measures in both samples.

It turned out that both samples contained many subjects who were majoring in Education (77 in the 1988 sample, 72 in the 1989 sample). This made it feasible to identify and compare subsamples as shown in Table 1, which presents *r*s of high school achievement and ability with the personality measures taken in college. Personality variables that produced no significant correlation with either achievement or ability in a sample or subsample are omitted from Table 1. Self-efficacy and self-monitoring, for example, are excluded.

In the 1988 total sample, a negative affect factor and the variables defining it (emotionality, fearfulness, etc.) are associated with having earned good grades in high school. In the 1989 total sample, a constructive thinking factor and the variables defining it (positive affect, optimism, etc.) correlate negatively with having earned good grades in high school.

In the 1988 sample, the paradoxical pattern of findings is stronger among Education majors than among other subjects. The paradoxical relationships appear in the 1989 sample as well, but are equally strong in the two subsamples. It therefore appears that the results are not a fluke (although they could be campus-specific and/or time-specific perturbations).

Implications: Why should students who excelled in high school describe themselves during college as emotional, fearful, problem-ridden, etc. to a greater extent than those who did not do so well in high school? And why should this pattern show up now, when it seldom or never did, say, 30 years ago? The "rude awakening" hypothesis -- the sudden upward shift in difficulty level of coursework as one progresses from high school to college -- can account for negative affect but not for the change in direction of relationship. Our data are also compatible with Postman's (1979) idea that academic achievement is progressively devalued as the television curriculum continues to supplant the school curriculum, as well as with findings which suggest that affiliation motives compete powerfully with achievement motives during the college years (Gough & Heilbrun, 1980; Huba, Segal, & Singer, 1977; Jackson, 1984). Interesting and important questions are posed by the array of *r*s in Table 1. Although the present study does not provide satisfactory answers to them, it is plausible to think that future studies might.

## References


Bachman, J. G., & O'Malley, P. M. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. Journal of Personality and Social Psychology, 35, 365-380.

Bachman, J. G., & O'Malley, P. M. (1986). Self-concepts, self-esteem, and educational experiences: The frog pond revisited (again). Journal of Personality and Social Psychology, 50, 35-46.

Calsyn, R. J., & Kenny, D. A. (1977). Self-concept of ability and perceived evaluation of others: Cause or effect of academic achievement? Journal of Educational Psychology, 69, 136-145.

Gough, H. G., & Heilbrun, A. B. (1980). The Adjective Check List manual. Palo Alto, CA: Consulting Psychologists Press.

Hansford, B. C., & Hattie, J. A. (1982). The relationship between self and achievement/performance measures. Review of Educational Research, 52, 123-142.

Huba, G. J., Segal, B., & Singer, J. L. (1977). Organization of needs in male and female drug and alcohol users. Journal of Consulting and Clinical Psychology, 45, 34-44.

Jackson, D. N. Personality Research Form manual (3rd edition). Port Huron, MI: Research Psychologists Press.

Marsh, H. W. (1991). Failure of high-ability high schools to deliver academic benefits commensurate with their students' ability levels. American Educational Research Journal, 28, 445-480.

Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. Journal of Counseling Psychology, 38, 30-38.

Postman, N. (1979). Teaching as a conserving activity. New York: Delacorte.

Wolfe, R. N., & Grosch, J. W. (1990a). Personality correlates of confidence in one's decisions. Journal of Personality, 58, 515-534.

Wolfe, R. N., & Grosch, J. W. (1990b, August). Personality measures and the illusion of confidence. Poster presented at the annual meeting of the American Psychological Association, Boston.

Table 1

Correlations of Achievement and Ability at the End of High School with Personality Measured During the College Years

| | 1988 Sample | | | | | | 1989 Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Achievement | | | Ability | | | Achievement | | | Ability | | |
| Personality variables | Total Sample | Education Cluster | Other Clusters | Total Sample | Education Cluster | Other Clusters | Total Sample | Education Cluster | Other Clusters | Total Sample | Education Cluster | Other Clusters |
| Emotionality | .33** | .49** | .17 | -.04 | .02 | .01 | | | | | | |
| Negative affectivity | .23** | .35** | .11 | -.04 | .04 | -.07 | | | | | | |
| Personal and social problems | .28** | .40** | .17 | -.05 | -.01 | -.02 | | | | | | |
| Fearfulness | .28** | .42** | .14 | -.08 | .06 | -.11 | | | | | | |
| Self-esteem | -.27** | -.35** | -.19 | -.12 | -.27** | -.01 | | | | | | |
| Optimism | -.20* | -.39** | .05 | -.11 | -.17 | -.06 | -.27** | -.13 | -.39** | -.07 | .05 | -.14 |
| Need for cognition[a] | -.04 | .01 | -.08 | .22** | .11 | .28* | .01 | .06 | .03 | .10 | .12 | .08 |
| Sociability[a] | .02 | -.27** | .25* | -.10 | -.22 | .02 | | | | | | |
| Factor 1: Negative affect | .33** | .52** | .14 | -.04 | -.03 | -.01 | | | | | | |
| Constructive thinking | | | | | | | -.22** | -.14 | -.29** | -.09 | -.01 | -.16 |
| Pleasantness | | | | | | | -.27** | -.32** | -.25** | -.15 | -.18 | -.09 |
| Positive affect | | | | | | | -.17* | -.26** | -.09 | -.10 | -.19 | -.02 |
| Well-being | | | | | | | -.28** | -.34** | -.23* | -.16* | -.14 | -.17 |
| Factor 1: Constructive thinking | | | | | | | -.22** | -.22 | -.22* | -.11 | -.13 | -.11 |

Note. Achievement is defined as average grade earned in high school, Ability as SAT Total. Because of missing data, number of subjects varies slightly within each column. The 1988 Ns range from 133 to 135 for Total Sample, from 61 to 63 for Education Cluster, and from 71 to 73 for Other Clusters. Corresponding ranges for 1989 are 172-174, 69-73, and 99-101, respectively.

[a] This variable does not load saliently on the Negative affect factor.

*$p < .05$, two-tailed. **$p < .01$, two-tailed.



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